Amendments to the Claims

Please **amend** Claims 2, and 7-27 and **add** new claims 28-30:

Claim 1. (Cancelled)

Claim 2. (Currently Amended) A substantially purified nucleic acid molecule that encodes a maize or a soybean enzyme, wherein said nucleic acid molecule comprises a nucleic acid sequence which shares between 100% and 95% sequence identity with a nucleic acid sequence selected from the group consisting of SEQ ID NOs: 11, 446, 935, 1108, 2042, 2166, 2252, 2644, 2681, and 2753, wherein said enzyme encoded by said nucleic acid molecule is triose phosphate isomerase, vacuolar H^+ translocating-pyrophosphatase, sucrose synthase, hexokinase, fructose 1,6-bisphosphate aldolase, fructose 6-phosphate 2-kinase, invertase, fructokinase, NDP-kinase, and UDP-glucose pyrophosphorylase, respectively.

Claims 3-6. (Cancelled)

Claim 7. (Currently Amended) A substantially purified nucleic acid molecule comprising a nucleic acid sequence which shares between 100% and 95% sequence identity with a nucleic acid sequence selected from the group consisting of SEQ ID NOs: 11, 446, 935, 1108, 2042, 2166, 2252, 2644, 2681, and 2753.

Claim 8. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 11.

Claim 9. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 446.

Claim 10. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 935.

Claim 11. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 1108.

Claim 12. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 2042.

Claim 13. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 2166.

Claim 14. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 2252.

Claim 15. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 2644.

Claim 16. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 2681.

Claim 17. (Currently Amended) The substantially purified nucleic acid molecule of claim 7, wherein said nucleic acid molecule comprises [[the]]a nucleic acid sequence which shares between 100% and 95% sequence identity with the nucleic acid sequence of SEQ ID NO: 2753.

Claim 18. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a maize triose phosphate isomerase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 11.

Claim 19. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a maize vacuolar H^+ translocating-pyrophosphatase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 446.

Claim 20. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a maize sucrose synthase, and wherein said nucleic acid sequence shares

between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 935.

Claim 21. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a maize hexokinase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 1108.

Claim 22. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a soy fructose 1,6-bisphosphate aldolase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 2042.

Claim 23. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a soy fructose 6-phosphate 2-kinase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 2166.

Claim 24. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a soy invertase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 2252.

Claim 25. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a soy fructokinase, and wherein said nucleic acid sequence shares

between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 2644.

Claim 26. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a soy NDP-kinase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 2681.

Claim 27. (Currently Amended) The substantially purified nucleic acid molecule of claim 2, wherein said enzyme is a soy UDP-glucose pyrophosphorylase, and wherein said nucleic acid sequence shares between 100% and 95% sequence identity with the nucleic acid sequence of [[is]]SEQ ID NO: 2753.

Claim 28. (New) A transformed seed comprising a transformed plant cell comprising a nucleic acid molecule which comprises

(a) an exogenous promoter region which functions in said plant cell to cause the production of an mRNA molecule, which is linked to;

(b) a structural nucleic acid molecule, wherein said structural nucleic acid molecule comprises a nucleic acid sequence, wherein said nucleic acid sequence shares between 100% and 95% sequence identity with a nucleic acid sequence selected from the group consisting of SEQ ID NOs: 11, 446, 935, 1108, 2042, 2166, 2252, 2644, 2681, 2753 and complements thereof, which is linked to;

(c) a 3' non-translated sequence that functions in said plant cell to cause the termination of transcription and the addition of polyadenylated ribonucleotides to said 3' end of said mRNA molecule.

Claim 29. (New) The transformed seed according to claim 28, wherein said nucleic acid sequence shares 100% sequence identity with a nucleic acid sequence selected from the group consisting of SEQ ID NOs: 11, 446, 935, 1108, 2042, 2166, 2252, 2644, 2681, 2753 and complements thereof.

Claim 30. (New) A method of growing a transgenic plant comprising

(a) planting a transformed seed comprising a nucleic acid molecule, which comprises a nucleic acid sequence, wherein said nucleic acid sequence shares between 100% and 95% sequence identity with a nucleic acid sequence selected from the group consisting of SEQ ID NOs: 11, 446, 935, 1108, 2042, 2166, 2252, 2644, 2681, 2753, and complements thereof; and

(b) growing a plant from said seed.